

Inclusive Health and Fitness Education for Sustainable Development

Aming 'a Rebert Maina
Science Education Department School of Education
University of Eldoret

Type of the Paper: Research Paper.
Type of Review: Peer Reviewed.
Indexed in: worldwide web.
Google Scholar Citation: IJRESS

How to Cite this Paper:

Aming'a, R. M., (2018) Inclusive Health and Fitness Education for Sustainable Development. International Journal of Research in Education and Social Sciences (IJRESS) 1 (1), 24-30.

International Journal of Research in Education and Social Sciences, (IJRESS)

A Refereed International Journal of OIRC JOURNALS. © Oirc Journals.



This work is licensed under a Creative Commons Attribution-Non Commercial 4.0 International License subject to proper citation to the publication source of the work.

Disclaimer: The scholarly papers as reviewed and published by the OIRC JOURNALS, are the views and opinions of their respective authors and are not the views or opinions of the OIRC JOURNALS. The OIRC JOURNALS disclaims of any harm or loss caused due to the published content to any party.



Inclusive Health and Fitness Education for Sustainable Development

Aming'a Robert Maina

Science Education Department School of Education University of Eldoret

ARTICLE INFO

Received 30th July, 2018 Received in Revised Form 15th August, 2018 Accepted 24th August, 2018 Published online 25th August, 2018

Keywords: Health and Fitness Education, Sustainable Development

Abstract

Health and fitness is viewed as both an enabler and an end for sustainable development. Health and fitness is a rapidly growing area of focus for people across the world. The popularity of health services on media news and talk shows, high tech health and fitness tracking devices and stress management workshops are just but a few of the indicators of a growing interest in whole person well-being. For individuals with intellectual and developmental disabilities, the benefits of quality health

and fitness are as great as those experienced by the rest of the human population. However, the opportunities to access quality health and fitness information and resources are not necessarily as available. There are many options for engaging in health and fitness activities in communities, and disability should not exclude a person from participation. However, in reality there are too few fitness opportunities that are of high quality and truly inclusive. This paper therefore aims to help readers advocate for inclusive health and fitness opportunities in their communities by providing a list of key characteristics of quality, inclusive programs, as well as a set of tips for individuals with disabilities. The paper has reviewed well researched sources in Kenya and the world over highlighting how and why health must be more present, more integral, and more influential. Despite a broad agenda and steep competition for attention health and fitness remains a prominent and vital component of the development agenda and this can only be possible through inclusive quality health and fitness education. The results will be focus on health and fitness for individuals with physical, social, vocational, spiritual, emotional, and psychological disabilities. It offers ways in which disability service providers, health and fitness professionals, community fitness and recreation programs and employers among others can help ensure what opportunities to choose and engage in health and fitness activities through inclusive education is achieved.

Introduction

According to Gupta & Vegelin (2016), a healthy population is essential for economic development. The poorest people on the planet tend to suffer most from the health effects from exposures to environmental hazards like air pollution and impure water. In turn, disease and disability related to polluted environments slows and blocks economic development. In addition to its toll on human suffering, illness carries a significant financial burden in the form of healthcare expenditures and lost productivity. For example, unhealthy children often cannot attend or perform well in school, and

unhealthy adults cannot work or care for their families. All this problems are as a result of minimal health and wellness education, which is often important for sustainable development.

The emergence of the concept of sustainable development as a guiding principle for policy formulation, the adoption at the UN Conference on Environment and Development (UNCED) in 1992 of Agenda 21, and subsequent adoption of the Programme for the Further Implementation of Agenda 21, have been important stimuli at international, national and local levels, for innovative programs of action to address current environment, health and development problems. international meetings have reinforced importance of fitness and health education,



environment and development issues on the international development agenda. For the first time, meetings of the G8, the United Nations Security Council, the World Economic Forum, the OECD, as well as follow-up to major international conferences have explicitly addressed health education issues requiring attention as development or security issues. Health has, in effect, become recognized as a central concern in development both as a resource for, and as an indicator of, sustainable development (Allen et al., 2013).

A major shift in thinking regarding the role of health and fitness education in poverty reduction and development is occurring (Kopnina & Meijers, 2014). Health education is far more central to poverty reduction than previously thought, and that realization is now beginning to shape governments' and global policies. It has been known for years that people who are poor are more likely to get sick. But now knowledge is accumulating about how ill health Health and Sustainable Development: Addressing the Issues and Challenges creates and perpetuates poverty, triggering a vicious cycle which hampers economic and social development and contributes to unsustainable resource depletion and environmental degradation. Evidence suggests that health gains trigger economic growth: if the benefits of that growth are equitably distributed, this can lead to poverty reduction.

Many of the diseases that are most closely associated with poverty are related to the environment, and the lack of health and fitness education. The World Health Organization estimates that roughly 25 percent of the disease burden in the developing world is due to such factors. Non-communicable diseases (NCDs), such as heart disease, stroke, diabetes, cancer, and chronic respiratory conditions, are of growing importance in low- and middle income countries. Many NCDs can be caused or worsened by environmental hazards, such as air pollution, toxic chemicals, and built environments that discourage physical activity. NCDs can impair economic development by pushing people into poverty, due to lost productivity and the costs of long-term therapy. In low- and middle-income countries, where people frequently pay out-of-pocket for healthcare and where healthcare systems have limited resources and capacity, NCDs take a large human and economic toll. 80 percent of all deaths due to NCDs occur in the developing world. People in the developing world die from NCDs at a younger age than people in the developed world. 29 percent of all deaths from NCDs occur in individuals under the age of 60 in low- and middle-income countries because of the minimal levels of education they posses in these areas (European Commission, 2010).

Background

As towns have encompassed an ever-growing proportion of the total human population, so they have become the predominant influence on health and wellbeing. During the next 20-30 years it is estimated that global urban populations will grow by 2-3 billion people, more than 1 million every week, while rural populations level off and decline (Hodkinson, 2010). This extraordinary transition provides a compelling rationale for an SDG for cities, with health and wellbeing as critical concerns in the formulation its targets and indicators. Urban environments affect health through such factors as exposure to pollutants, safety, crowding, shelter and sanitation, levels of physical activity, food choices, and social connection and participation. These factors are determinants of common, contemporary health problems such as injuries, respiratory diseases, heart disease, diabetes, cancers and mental disorders, as well as an array of infectious diseases.

Such regions are also powerful drivers of population mobility, which can affect regional or global communicable disease risks, particularly as disease vectors interact with urban conditions and there is greater global connectivity between cities. The ways people live in and choose to structure their residence also affect the environment, through loss of changes ecosystems, biodiversity, to atmospheric perturbations, greenhouse gas emissions and the production of other pollutants. These environmental changes, in turn, have feedback impacts on health and wellbeing (Rousset & Lion, 2011).

Within towns, inequity in access to infrastructure and other resources — transport, education, nutritious food, employment, public spaces, creates barriers to good health (Obrusnikova & Dillon, 2011). Health care access Economic development has led to tremendous improvements in people's well-being, but often at the expense of the environment. Industrialization has contributed to pollution of air and water, changing dietary patterns, and shifting patterns of transportation and land use. Exposures to air and water pollutants directly increase disease. Similarly, dietary changes and decreased levels of



physical activity, resulting from transportation and other work and lifestyle changes, are contributing to global epidemics of obesity, diabetes, and associated diseases. Globalization and the large geographic scale over which rapid industrialization is occurring make these environmental health problems global health problems.

To ensure sustainable development, there is a need for individuals to equip themselves with various lessons that target their health and wellbeing. Sustainable development is frequently defined as development that meets the needs of present generations without compromising the ability of future generations to meet their own needs. As evidence of the harm to health and well being from widespread environmental degradation and global climate change grows, communities and governments are placing greater emphasis on assuring that economic development is achieved in a sustainable way.

Protecting and creating healthy environments through education is a critical component of sustainable development. Health education can be integrated into sustainable development by: **Improving** environmental quality for the poorest populations with the greatest burden of environmental diseases, by reducing exposures to air pollution in homes and villages from biomass burning, and providing clean water and sanitation; Identifying efforts to address environmental problems that can also provide health benefits. For example, creating environments that encourage biking and walking for transportation reduces greenhouse gas and toxic air pollution emissions (environmental benefit) and increases physical activity (health benefit) (Erten & Savage, 2012).

Recognizing that some policies, practices, and technologies designed to promote sustainability and economic development may have unintended adverse environmental health effects, and attempting to prevent or mitigate these before they are implemented is one main reason as to why health education should be fostered among individuals in the society.

From an environmental health point of view, sustainable development involves the effect of the environment on health, the resulting impact on development, and subsequent effects directed back to the environment and health. For those who continue to suffer in poverty, traditional sanitation risks and environmental exposures continue to create barriers

to individuals, community, and national economic growth, productivity, and well-being, and this often results due to low levels of inclusive health and fitness education. These are the needs of the present, while the needs of future generations are reflected in how development affects the environment, and its resulting impact on health due to inclusive education. Inclusive health education has benefited the health of billions of individuals, and has also created environmental changes that have led to new exposures and threats to human health. Determining how to achieve development through inclusive health and fitness education, without these unintended consequences is an essential principle of sustainable development (Erten & Savage, 2012).

Countries face a myriad of health-related problems relating on one hand to poverty and a lack of access to basic services/resources, and on the other to largescale, rapid industrialization, urbanization, demographic change, and technological development (Polasky et al., 2015). The problems facing the health today are increasingly multidisciplinary in nature, often ill-defined, and have uncertain solutions. While the health sector itself is changing to respond to many of these challenges, it cannot address these problems on its own. Many of the key determinants and solutions to health and disease lie outside the direct realm of the health sector, in sectors concerned with environment, and sanitation, agriculture, education, employment, urban and rural livelihoods, trade, tourism, industrial development, energy and housing where issues of health and fitness education are discussed. Addressing the underlying determinants of health through intersectional efforts is key to ensuring sustained health improvements and ecologically sustainable development.

The main health goal of governments and of WHO was declared in 1977, to be: "Attainment by all the people of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life." However, various trends, including globalization of trade, travel and technology, urbanization and the growth of megacities, widening gaps between rich and poor, the continuing burden of infectious diseases, the rise in non-communicable diseases, and growth in environmental threats, and limited education on health matters made a reassessment of this strategy.

The renewed "Health for All in the 21st Century", strategy adopted at the World Health Assembly in



1998 set out global priorities and targets for the first two decades of the 21st century, which aim to create the conditions for people worldwide to reach and maintain the highest attainable level of health throughout their lives. The strategy is based on the principles of social justice, equity and human development, and emphasizes the prevention of ill-health, minimization of health risks and promotion of inclusive health education. Conceived in these terms, the improvement of health requires more than the services delivered by the health sector alone; the contribution of other sectors is explicitly recognized as vital for improving the health and well-being of the population.

Study Methodology

This review involved a two-fold process in finding relevant literatures related to the current studies. First, studies were searched using key word searches. Several words were used in connection to inclusive health and fitness education for sustainable development. Student performance related words were also used. Extensive series of cross-searches on the study topic using Hindawi research database, which enabled the simultaneous search of multiple databases such as academia.com, SAGE, psychology and behavioral sciences collection among other databases. Further the literature search was conducted using Google Scholar and via the references identified in the articles from the given databases and sites. Secondly, the articles were screened to verify their authenticity. The articles were evaluated in terms of their research design and methods and the type of journal that is whether peer-reviewed or not, there was the use of peer-reviewed journals only (by looking at whether the journal has an abstract, restrained and thoughtful, footnotes and citations, bibliography and authors credentials among other criterions). The topic, abstract and objectives of the study were also considered to examine whether the study based on the issues related to the current study. The focus of these searches was to access full text documents and was not limited to a particular date range. Majority of the documents were journal articles, book chapters and research reports.

Results and Discussion

Perhaps the greatest obstacle to reorienting the world's educational systems is the lack of clarity regarding goals. In simple terms, those who will be called upon to educate differently (e.g., the world's

59,000,000 teachers or instructors on health issues) eventually will ask, "What am I to do differently?" "What should I do or say now that I didn't say before" These simple questions leave most "experts" in a quandary and the questioner without an adequate response (Fong Poon-Mcbrayer, 2013).

Health education for sustainable development remains an enigma to many governments and schools. Governments, ministries of education, school, and educators have expressed a willingness to adopt various programs; however, no successful working models currently exist. Without models to adapt and adopt, governments and schools must create a process to define what education for sustainability is with respect to the local context. Such a process is challenging. It calls for a public participation process in which all of the stakeholders in a community carefully examine what they want their children to know, do, and value when they leave the formal education system (West & Gardner, 2013). This means that the community must try to predict the environmental, economic, and social conditions of the near and distant future.

Public participation processes whereby stakeholders examine the needs and desires of a community and identify essential elements of basic and secondary education can be adapted and implemented in many types of communities. Seeking the opinions of parents and workers to shape the education of their children will be a totally new idea in some cultures. Although community consultation and other forms of public participation can be effective tools, they should be introduced slowly and in accordance with local traditions and cultures where they have not been used previously. However valuable, the community consultation process is not without pitfalls (Goebe, 2007). For example, an organized, educated, and articulate few might dominate the process; people who have received little formal education may not feel they have the expertise to take part in or contribute to the process; and the worldviews and life experiences of some people might prevent them from perceiving or accommodating the changes that will come to all regions of the planet in the coming decades. In these cases, how the outcome of the process is used becomes important. A continuum of implementation exists, ranging from ruthlessly implementing the results of a skewed process to totally ignoring the outcomes of the process. The interpretative, political, and interpersonal skills of the



implementation team are key in this effort (Bourke, 2011).

Inclusive health and fitness education carries with it the inherent idea of implementing programs that are locally relevant and culturally appropriate. Just as any sustainable development program must take into consideration the local environmental, economic, and societal conditions, so too must ESD programs consider these same conditions. As a result, each region must create its own program. It is impossible to create an international, or even in many cases a national, curriculum that would be relevant to all communities.

It should be apparent to ministries of education and schools that developing locally relevant curriculums will be facilitated by creating public participation processes that allow communities to shape the major ideas underpinning their own curriculums. Rather than spending time searching for curricular models to adapt, it would be better to invest time and resources in developing processes by which communities of different sizes and traditions can define their own programs.

However, the programs have succeeded in ensuring awareness, and inherent in building awareness are efforts to outline important linkages between education and more sustainable societies (e.g., increases in female literacy reduces birthrates and improves family quality of life). In large part, perceiving a need brings about a corresponding change in educational systems. Unfortunately, the need to achieve sustainable development is not perceived today as sufficiently important to spark a large response in the educational community. If leaders at all levels of governance are to make progress, the recognition and active involvement of the education sector is imperative (Wiseman & Horton, 2011).

Conclusion

To successfully implement health and fitness education goals, governments and school must plan ahead and develop strategies to address various issues that mitigate sustainable development in their regions. These issues should be addressed at every

level, especially the national level, to ensure consistent implementation of policies across the country. Purposeful deliberation and planning around these issues as well as issues particular to each region will increase the likelihood of successfully implementation of programs and reorienting curriculum to achieve sustainability.

Recommendations

Health education, environment and sustainable development policies and programs depend on convenient access to information about a large variety of hazards, ranging from biological hazards in food and water, to chemical hazards such as pesticides, to various physical and social factors. This is necessary if health authorities are to effectively discharge their responsibility to protect public health. But it also serves to clarify the extent to which health hazards are attributable to environmental conditions and/or to the activities of sectors other than health.

Monitoring systems need to be designed to ensure that the exposure information collected is relevant to health concerns, and not merely used to monitor effectiveness of environmental control measures. Currently, few monitoring systems are set up with the aim of comprehensively assessing the various exposure routes (such as air and water) of potential contaminants, and this should be done through inclusive health and fitness education.

Moreover, integrated pollution control mechanisms are usually lacking. In general, knowledge of environment and health risks is segmented, and incomplete. Mechanisms to ensure coordination at national, regional and local levels regarding health effects assessment and the development of adequate reporting systems are commonly lacking. Equally, mechanisms are frequently not in place to ensure that such information, once obtained, is transmitted to the various relevant sectors for action. Integrated databases on development hazards, environmental exposures and health, are urgently required. Well developed health-and-environment information systems, based on relevant data sets, are essential if scientific monitoring information is to be provided in support of policy and decision-making, planning and evaluation.

References

Allen, B., Nowak, M. a, & Wilson, E. O. (2013). Limitations of inclusive fitness. *Proceedings of the National Academy of Sciences of the United States of America*, 110(50), 20135-9.

Bourke, A. F. G. (2011). The validity and value of inclusive fitness theory. *Proceedings. Biological sciences / The Royal Society*, 278(1723), 3313-20.



- Erten, O., & Savage, R. S. (2012). Moving forward in inclusive education research. *International Journal of Inclusive Education*, 16(March 2015), 221-233.
- European Commission. (2010). Communication from the Commission EUROPE 2020 A strategy for smart, sustainable and inclusive growth. *Com* (2010) 2020, *Brussels*(3 March), Commission of the European Communities. Retrieved from http://ec.europa.eu/europe2020/index_en.htm
- Fong Poon-Mcbrayer, K., & Wong, P.-M. (2013). Inclusive education services for children and youth with disabilities: Values, roles and challenges of school leaders. *Children and Youth Services Review*, 35, 1520-1525.
- Goebel, A. (2007). Sustainable urban development? Low-cost housing challenges in South Africa. *Habitat International*, 31(3-4), 291-302.
- Gupta, J., & Vegelin, C. (2016). Sustainable development goals and inclusive development. *International Environmental Agreements: Politics, Law and Economics*, 1-16. Springer Netherlands.
- Hodkinson, A. (2010). Inclusive and special education in the English educational system: Historical perspectives, recent developments and future challenges. *British Journal of Special Education*, *37*(2), 61-67.
- Kopnina, H., & Meijers, F. (2014). Education for sustainable development (ESD): exploring theoretical and practical challenges. *International Journal of Sustainability in Higher Education*, 15(2), 6.
- Obrusnikova, I., & Dillon, S. R. (2011). Validation of the Inventory of Teaching Challenges for Inclusive Physical Education: Autism Spectrum Disorders. *Journal of Developmental and Physical Disabilities*, 23(6), 563-579.
- Polasky, S., Bryant, B., Hawthorne, P., Johnson, J., Keeler, B., & Pennington, D. (2015). Inclusive Wealth as a Metric of Sustainable Development. *Annual Review of Environment and Resources*, 40(1), 150902153650003. Retrieved from http://www.annualreviews.org/doi/abs/10.1146/annurev-environ-101813-013253
- Rousset, F., & Lion, S. (2011). Much ado about nothing: Nowak et al.'s charge against inclusive fitness theory. *Journal of Evolutionary Biology*.
- West, S. A., & Gardner, A. (2013). Adaptation and Inclusive Fitness. Current Biology.
- Wiseman, A., & Horton, K. (2011). Developing clinical scenarios from a European perspective: Successes and challenges. *Nurse Education Today*, *31* (7), 677-681.